



PS/50

RECUMBENT BIKE OWNER'S GUIDE



THANK YOU FOR SELECTING TRUE

In 1981, Frank Trulaske launched TRUE Fitness®, and began manufacturing hand-crafted treadmills.

His team's obsession with quality has propelled TRUE to the top of the fitness industry and has created one of America's oldest, largest and most respected fitness equipment manufacturers.

Over the years, TRUE has designed, developed, patented and fabricated many new cutting-edge innovations for their products. Such advancements include groundbreaking new features, state-of-the-art manufacturing components, and technological breakthroughs.



"OUR ORIGINAL GOAL WAS TO BUILD THE WORLD'S BEST FITNESS EQUIPMENT, AND TODAY WE BELIEVE WE'RE DOING IT!"

-FRANK TRULASKE

While TRUE has expanded its line of products, intensive quality control standards guarantee excellence in every phase of production. This results in the finest products available in the marketplace.

TRUE is the choice for workouts among beginners, rehab patients and top athletes worldwide.

Today TRUE Fitness offers a full line of premium elliptical trainers, treadmills, upright and recumbent bikes, and flexibility equipment.



REVIEW FOR YOUR SAFETY

IMPORTANT SAFETY INSTRUCTIONS

When using this exercise machine, basic precautions should always be followed, which includes the following:

Read and understand all instructions and warnings prior to use.

Obtain a medical exam before beginning any exercise program. If at any time during exercise you feel faint, dizzy, or experience pain, stop and consult your physician.

Obtain proper instruction prior to use.

Inspect the bike for incorrect, worn, or loose components and do not use until corrected, replaced, or tightened prior to use.

Do not wear loose or dangling clothing while using the bike.

Care should be used when getting on or off the bike.



Read, understand, and test the emergency stop procedures before use.

Disconnect all power before servicing the bike.

Do not exceed maximum user weight of 350 lbs.

Keep children and animals away.

All exercise equipment is potentially hazardous. If attention is not paid to the conditions of equipment usage, death or serious injury could occur.

- Begin pedaling.
- The display will light up and prompt you for your weight, workout selection, and workout time.
- Enter your workout parameters and press  , or immediately press  for a quick start into a manual workout.

The PS50 will pause indefinitely.

Press the  key to change the workout data display.

STARTING UP

PAUSING YOUR WORKOUT

CHANGING THE DATA DISPLAY



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Specifications/Features/Software are subject to change

RIDING YOUR BIKE

IN THIS CHAPTER:

GETTING COMFORTABLE
RIDING EFFICIENTLY & COMFORTABLY
USING THE CHEST STRAP
USING CONTACT HEART RATE
GETTING THE BEST RESULTS POSSIBLE

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Pre-Set Workouts

Chapter 4: Heart Rate Control

Chapter 5: Creating an Exercise Program

Chapter 6: Care and Maintenance

The body weight setting does not affect the calorie expenditure calculation. Unlike treadmills or other weight-bearing exercises, calories burned during exercise biking does not change with different body weights.

Adjust the seat so that when your leg is fully extended with your feet in the pedals, your knee is slightly bent.

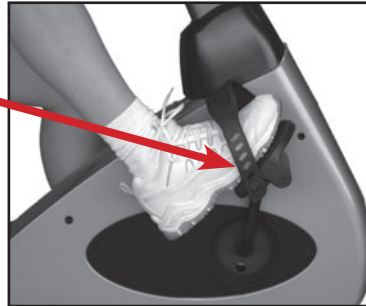


SETTING YOUR WEIGHT

SEAT ADJUSTMENT

Riders are most efficient if they place the ball of their foot in the center of the pedal.

Other riders are more comfortable if the arch of their foot is against the pedal. Riders are encouraged to be as efficient as possible, but use



FOOT POSITION

your own judgment in the comfort/efficiency tradeoff.





Most riders will find a comfort/efficiency sweet spot at a pedal cadence around 80 rpm. More serious riders desiring maximum performance typically pedal at around 100 rpm. For electromechanical and safety reasons, the bike will not provide the fully requested workload when your pedal cadence falls below 55 rpm.

Breathe in a regular and relaxed manner. Many exercisers do not breathe enough, which reduces their exercise capacity and comfort. You might want to try breathing deeper and more frequently to see if it helps your exercise regime.

PEDAL
CADENCE

BREATHING

The PS50 bike has two ways of monitoring your heart rate:

1. By using a chest strap that transmits your heart rate to the bike via radio.



2. By using the metal contact heart rate pads on the handlebars.



UPRIGHT HRC PADS



RECUMBENT HRC PADS

Although your bike functions fine without using the heart rate monitoring feature, this kind of monitoring gives you valuable feedback on your effort level. Chest strap monitoring also allows you to use HRC (Heart Rate Control)[®], which is the most advanced exercise control system available.

MONITORING YOUR HEART RATE

When you wear a Polar® or compatible transmitter strap, the bike will display your heart rate as a digital beats-per-minute (bpm) readout.



The transmitter strap should be worn directly against your skin, about one inch below the pectoral muscles/ breast line (see picture below). Women should be careful to place the transmitter below their bra line.

Some moisture is necessary between the strap and your skin. Sweat from your exercise works best, but ordinary tap water may be used prior to your workout if desired.

More Information About Heart Rate

An average 30-year-old might have a resting heart rate, when sitting totally still for several minutes, of 65. During hard exercise that can be sustained for 10 to 15 minutes it might be around 140 continuously. A maximum heart rate that requires maximal exercise for several minutes to attain is 185.

A 30-year-old in good shape might have a resting heart rate near 55, and might exercise for 20 minutes at a heart rate of 160.

A world-class distance runner or professional cyclist might have a resting heart rate near 45.

CHEST STRAP HEART RATE MONITORING

The CHR system lets you monitor your heart rate without wearing a strap.

Gently grasp the contact heart rate pads as shown below.



When the system detects your hands, a red heart will appear in the Heart Rate field of the data display and will flash in time with your heart beat. During this time, the system is analyzing and locking in your heart rate. Within about 15 seconds, your digital heart rate in beats per minute (bpm) should be displayed.

A Note on CHR Accuracy

CHR monitoring may be a bit less accurate than a chest strap, since the heart rate signals are much stronger at the chest.

About 5% of the population cannot be picked up by any CHR system. This is because their heart is positioned in a more up-and-down manner in their chest, as opposed to leaning over to one side.



GETTING THE BEST RESULTS POSSIBLE

CHAPTER ONE: RIDING YOUR BIKE

1. Exercise with smooth body motions. Avoid excessive body motion, especially in your arms and upper body.
2. Breathe smoothly and regularly, and avoid talking. (Talking will cause unrepresentative heart rate spikes of 5 to 10 bpm.)
3. Grip the pads lightly, not tightly.
4. Make sure your hands are clean, free of both dirt and hand lotions.

When using a HRC workout, it is best to use chest strap monitoring. These workouts work best with the extra accuracy gained from a chest-contact heart rate monitoring system.

FOR BEST RESULTS

THE DISPLAY

IN THIS CHAPTER:

THE DISPLAY

THE UPPER PANEL

THE LOWER PANEL

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Pre-Set Workouts

Chapter 4: Heart Rate Control

Chapter 5: Creating an Exercise Program

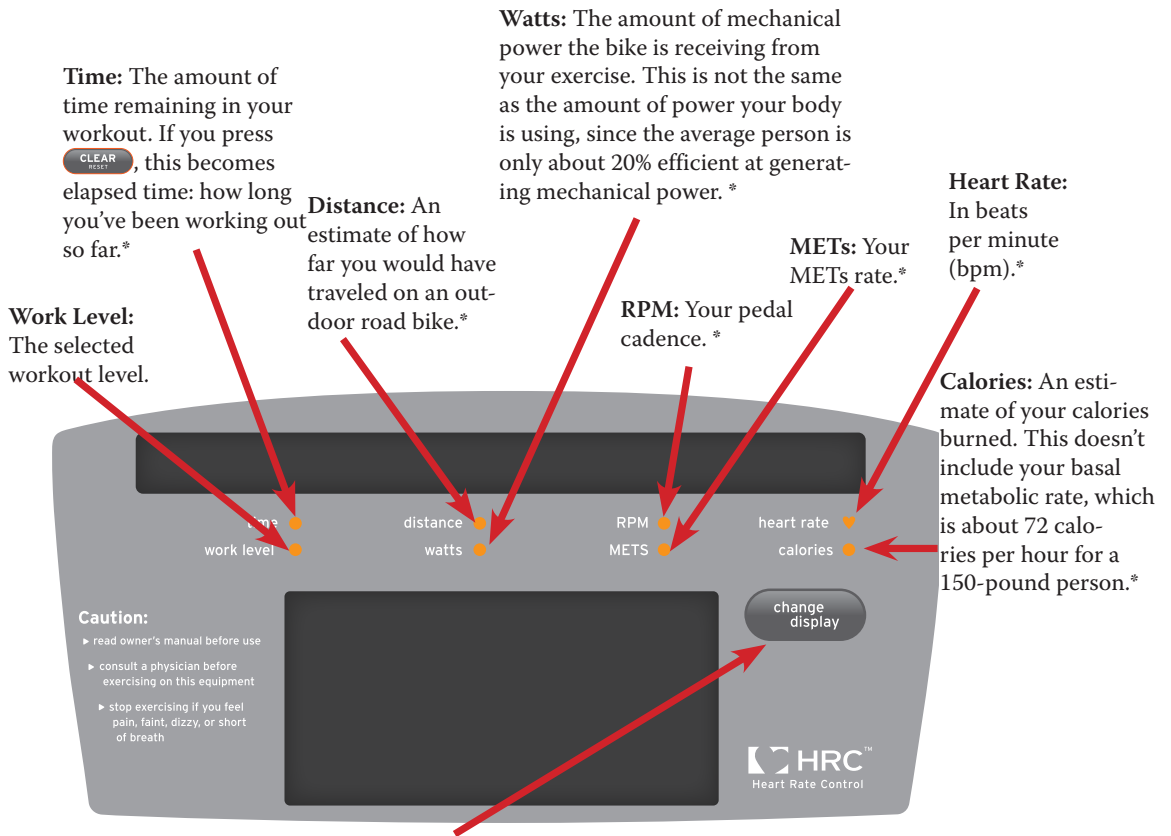
Chapter 6: Care and Maintenance



YOUR DISPLAY

CHAPTER TWO: THE DISPLAY

The bike display has two jobs: to let you control the bike operation, and to give you feedback about your workout. The controls are simple and designed to be foolproof; it's hard to press a "wrong" key. You can monitor eight different kinds of physiological data, and your workout progress is tracked graphically with the center matrix display

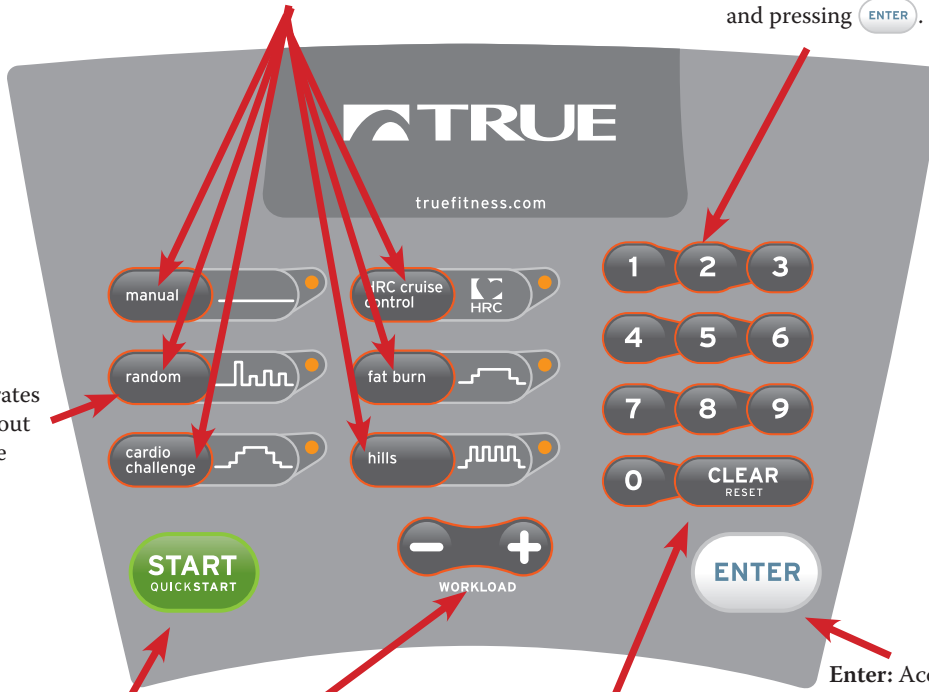


*Pressing the “**Change Display**” key switches the readout from the top values to the bottom values and will light up the LEDs of the values now being displayed. If you press and hold the “Change Display” key for one second, the display will enter “Scan Mode” and switch between the two sets of values.

Pre-set Workouts: Selects desired workout profile.

Numeric: Used for data entry in workout setup. During a workout, used to change workload by entering a numeric value and pressing **ENTER**.

Random: Generates a different workout profile each time



Start: Starts a workout

Workload: Adjusts workload up and down. Keys repeat if held down.

Clear: Zeros-out current data entry.

Enter: Accepts the current data entry.


PRE-SET WORKOUTS

IN THIS CHAPTER:

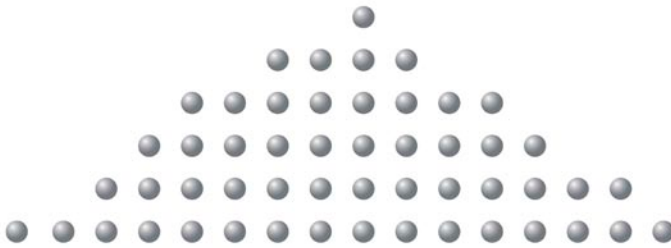
HOW THESE MODES WORK
WORKOUT PROFILES

Chapter 1: Riding Your Bike
Chapter 2: The Display
Chapter 3: Pre-Set Workouts
Chapter 4: Heart Rate Control
Chapter 5: Creating an Exercise Program
Chapter 6: Care and Maintenance

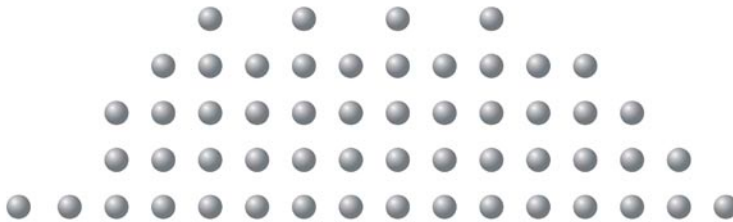
Five different pre-set workouts are discussed below (HRC Cruise Control is covered in Chapter 4):

- **Manual:** this mode changes workload in 10-watt increments. The workload stays the same at any pedal cadence (called constant power control) unless you drop below 55 rpm. Below 55 rpm, workload is reduced along with pedal cadence, to prevent the sensation of the pedals “locking up.”
- **Random:** creates a different program profile each time you press the  key.
- **Cardio Challenge:** with the workload gradually rising until you reach the middle of your workout time, then gradually decreasing to the end.
- **Fat Burn:** with a warm-up stage increasing to a steady-state workload for the majority of the workout, then a cool-down at the end.
- **Hills:** four work intervals separated by four rest intervals.

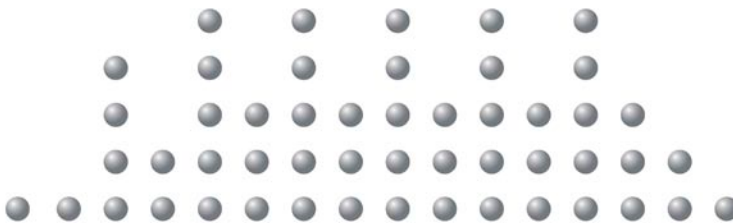
Sixteen different levels are available to change the difficulty of a pre-set workout. The workload intensities expand and contract depending on the level.



CARDIO CHALLENGE



FAT BURN



HILLS

HEART RATE CONTROL

IN THIS CHAPTER:

HRC INTRODUCTION

HOW THESE MODES WORK

HRC PROGRAMS

IMPORTANT POINTS ABOUT HRC

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Pre-Set Workouts

Chapter 4: Heart Rate Control

Chapter 5: Creating an Exercise Program

Chapter 6: Care and Maintenance

TRUE's HRC workout lets the bike monitor your relative exercise intensity by way of your heart rate, then automatically adjust the workload to keep you at your desired exercise intensity.

Your heart rate is a good measure of your body's exercise stress level. It reflects differences in your physical condition, how tired you are, the comfort of the workout environment, even your diet and emotional state. Thus, using heart rate to control workload takes the guesswork out of your workout settings.

Consult your physician before using HRC workouts for advice on selecting a target heart rate range. Also, it is important to use the bike for several workouts in the Manual mode while monitoring your heart rate. Compare your heart rate with how you feel to ensure your safety and comfort.

You need to wear a heart rate monitoring chest strap to use HRC. See the "Monitoring Your Heart Rate" section in *Chapter 1* for a guide to proper usage.



HRC INTRODUCTION




Constant HRC is the best-known type of HRC, and is the easiest to use. The bike will gradually raise your heart rate so that you reach your target within 5 to 7 minutes.

Note that as you tire during your workout, especially in the last third, workload will usually have to be reduced to keep you at a steady target heart rate.

Cruise Control is the simplest way to enter Constant HRC training. While in manual or any program you can enter Constant HRC by simply pressing the HRC key. Your current heart rate will be set as the target.

For best results, you should be at least five minutes into your workout and warmed up. This will allow Cruise Control to more accurately control your heart rate.

Remember, you must be wearing a chest strap, and your heart rate should be displayed in the Heart Rate window.

To change your target heart rate press HRC. Edit the target using  /  or numeric keys and press  .

CONSTANT
HRC

CRUISE
CONTROL

The PS50 bike has two types of heart rate control:

- **Constant:** pick a target heart rate, and the bike will control your workout from the very beginning so that you reach your target within five to seven minutes.
- **Cruise Control:** while in any program, set your current heart rate as your target by pressing a single key.

Remember to check with your physician before beginning any exercise program. He/She can help determine an appropriate target heart rate. Medications often affect heart rate.

TYPES OF
HRC

MAXIMUM
HEART RATE
AND TARGET
HEART RATE

The heart rate monitor transmitter strap should be worn according to the guidelines in *Chapter 1*.

If the transmitter strap is adjusted or moved while exercising, heart rate monitoring may be temporarily affected.

If communication is lost for 30 seconds, the bike will exit the HRC workout into a manual workout.

The transmitter strap sends a low-level radio signal to the bike, so interference from other radio and sound waves (including everything from cordless telephones to loudspeakers) is possible. The good news is that this interference is usually quite brief. If you continue to have intermittent heart rate display problems, consult your local service technician, as the transmitter strap batteries may be low.

Make sure you breathe smoothly and regularly.

Talking during your workout usually causes heart rate spikes of five beats per minute or more, so avoid talking as much as possible.

Maintain a smooth pedaling motion.

Two users wearing the same kind of transmitter at the same time and in close proximity may cause false heart rate display readings.

TARGET HEART RATE TIPS

CREATING AN EXERCISE PROGRAM

IN THIS CHAPTER:

WHAT IS THE F.I.T. CONCEPT?

USING THE F.I.T. CONCEPT

YOUR F.I.T. PROGRAM

ESTABLISHING AND MAINTAINING FITNESS

WEIGHT CONTROL &

WEIGHT AND SPORTS TRAINING

Chapter 1: Riding Your Bike

Chapter 2: The Display

Chapter 3: Pre-Set Workouts

Chapter 4: Heart Rate Control

Chapter 5: Creating an Exercise Program

Chapter 6: Care and Maintenance

The workout portion of your exercise program consists of three major variables: Frequency, Intensity, and Time.

Frequency: How Often You Exercise

You should exercise three to five times a week to improve your cardiovascular and muscle fitness. Improvements are significantly smaller with less frequent exercise.

Intensity: How Hard You Exercise

Intensity of exercise is reflected in your heart rate. Exercise must be sufficiently rigorous to strengthen your heart muscle and condition your cardiovascular system. Only your doctor can prescribe the target heart range appropriate for your particular needs and physical condition.

Start with exercise that stimulates you to breathe more deeply.

Alternate days of moderate and easy exercise to help your body adapt to new levels of exertion without unnecessary strain.

If you are just beginning an exercise program, you may be most comfortable pedaling at a speed of 1-2 mph. As you use your bike regularly, higher speeds may be more comfortable and more effective.

Inability to maintain a smooth, rhythmic motion suggests that your speed and/or tension may be too great.

If you feel out of breath before you have exercised 12 minutes, you are probably exercising too hard.

WHAT IS THE F.I.T. CONCEPT?

As your fitness level improves, you will need to increase your workout intensity in order to reach your target heart rate. The first increase may be necessary after two to four weeks of regular exercise. Never exceed your target heart rate zone. Increase the speed and/or workload on the bike to raise your heart rate to the level recommended by your doctor.

METs

One MET is the amount of energy your body uses when you're resting. If a physical activity has an equivalent of 6 METs, its energy demands are 6 times that of your resting state. The MET is a useful measurement because it accounts for differences in body weight. See *Appendix B* for more details.

Time: How Long You Exercise

Sustained exercise conditions your heart, lungs and muscles. The longer you are able to sustain exercise within your target heart range, the greater the aerobic benefits.

To begin, maintain two to three minutes of steady, rhythmic exercise and then check your heart rate.

The initial goal for aerobic training is 12 continuous minutes.

Increase your workout time approximately one or two minutes per week until you are able to maintain 20-30 continuous minutes at your target heart rate.



USING THE F.I.T. CONCEPT

CHAPTER FIVE: CREATING AN EXERCISE PROGRAM

The F.I.T. concept is designed to help you begin a program tailored to your needs. You may wish to keep an exercise log to monitor your progress.

You can get valuable fitness benefits from your TRUE PS Bike. Using the bike regularly may increase the ability of your heart and lungs to supply oxygen and nutrients to exercising muscles over an extended period of time. The bike will also help you develop added muscle endurance and balanced strength throughout your body.

Calculate your maximum heart rate as a first step in developing your fitness program. The formula to calculate average maximum heart rate for one minute is 220 beats per minute minus your age. To find your pulse, locate a vein on your neck or inside your wrist, then count beats for ten seconds, then multiply by six. (See chart in *Appendix A*.)

It's also important to know your target training zone or target heart rate. The American Heart Association (AHA) defines target heart rate as 60-75 percent of your maximum heart rate. This is high enough to condition, but well within safe limits. The AHA recommends that you aim for the lower part of the target zone (60 percent) during the first few months of your exercise program. As you gradually progress you can increase your target to 75 percent. According to the AHA, "Exercise above 75 percent of the maximum heart rate may be too strenuous unless you are in excellent physical condition. Exercising below 60 percent gives your heart and lungs little conditioning."

USING
THE F.I.T.
CONCEPT

YOUR
FITNESS
PROGRAM

DETERMINING
YOUR NEEDS

In addition to monitoring your heart rate as you exercise, be certain of how quickly your heart rate recovers. If your heart rate is over 120 beats per minute five minutes after exercising, or is higher than normal the morning after exercising, your exertion may be too strenuous for your current level of fitness. Reducing the intensity of your workout is recommended.

The age-adjusted target heart rates indicated in the chart in *Appendix A* reflect averages. A variety of factors (including medication, emotional state, temperature, and other conditions) can affect the exercise heart rate appropriate for you.

Warning: Consult your doctor to establish the exercise intensity (target heart rate zone) appropriate for your age and condition before beginning any exercise program.

Warm-Up: Slow and Deliberate Exercise

You are not warmed up until you begin to perspire lightly and breathe more deeply. Warming up prepares your heart and other muscles for more intense exercise and helps you avoid premature exhaustion. Start slowly, exploring different workloads until you can comfortably sustain your exercise level.

A good suggestion is a minimum of three minutes. Perspiration on your brow is a good indicator of a thorough warm-up. The older you are, the longer your warm-up period should be.

BEGINNING YOUR EXERCISE PROGRAM

Workout: Brisk and Rhythmic Exercise

Working out trains and conditions your heart, lungs, and muscles so your body can operate more efficiently. Gradually increase the intensity of your workout to strengthen your cardiovascular system. To warm up, concentrate on pedaling smoothly before increasing speed.

Cool-Down: Slow and Relaxed Exercise

Cooling down relaxes your muscles and gradually lowers your heart rate. Slowly reduce your workload until your heart rate is below 60 percent of your maximum heart rate. The cool down should last at least five minutes, followed by some light stretching to enhance your flexibility.

Beginning a Fitness Program

If you cannot sustain 12 continuous minutes in your target heart rate zone, exercise several times a day to get into the habit of exercising.

Try to reach and maintain 60-65 percent of your maximum heart rate. Alternate exercise with periods of rest until you can sustain 12 continuous minutes of exercise at 60-65 percent of your maximum heart rate.

Begin exercising in three to five minute sessions.

If you can sustain 12 but not 20 continuous minutes of exercise in your target heart rate zone:

Exercise three to five days a week and rest at least two days per week.

Try to reach and maintain 60-75 percent of your maximum heart rate with moderate rhythmic exercise.

Begin with 12 continuous minutes. Increase your time by one to two minutes per week until you can sustain 20 continuous minutes.

If you can sustain 20 continuous minutes in your target heart rate zone, begin to increase the length and intensity of your workout:

Exercise four to six days a week or on alternate days.

Try to reach and maintain 70-85 percent of your maximum heart rate with moderate to somewhat hard exercise.

Exercise for 20-30 minutes.

Consistent aerobic exercise will help you change your body composition by lowering your percentage of body fat. If weight loss is a goal, combine an increase in the length of your workouts with a moderate decrease in caloric intake. For weight control, how long and how often you exercise is more important than how hard you exercise.

Exercise four to five times a week.

ESTABLISHING
AEROBIC
FITNESS

MAINTAINING
AEROBIC
FITNESS

MANAGING
WEIGHT

Try to reach and maintain 60-75 percent of your maximum heart rate with moderate exercise.

Exercise for 30-45 minutes at 60-65 percent of your target heart rate.

Here are some tips to achieving your weight management goal:

Consume most of your dietary calories at breakfast and lunch, and eat a light dinner. Do not eat close to bedtime.

Exercise before meals. Moderate exercise will help suppress your appetite.

Take exercise breaks throughout the day to help increase your metabolism and caloric expenditure.

When you are training to improve strength and performance:

Exercise four to five days a week. Alternate exercise days between intervals of hard to very hard exercise and easy to moderate exercise.

Exercise for 30 minutes or longer.

Warning: these strategies are intended for average, healthy adults. If you have pain or tightness in your chest, an irregular heartbeat, shortness of breath or if you feel faint or have any discomfort when you exercise, ***stop!*** Consult your physician before continuing. Remember, every workout should begin with a warm-up and finish with a cool-down.

CARE AND MAINTENANCE

IN THIS CHAPTER:

HOW TO CARE FOR YOUR BIKE

Chapter 1: Riding Your Bike
Chapter 2: The Display
Chapter 3: Pre-Set Workouts
Chapter 4: Heart Rate Control
Chapter 5: Creating an Exercise Program
Chapter 6: Care and Maintenance

Your PS50 bike does not require any routine maintenance, including lubrication. Keeping it clean is the most important task.

After every workout: Perspiration should be wiped from the control console, contact heart rate pads, shrouds, and seat.



Weekly: Wipe down your PS50 bike once a week with a water-dampened soft cloth. On the contact heart rate pads, use a glass cleaning solution. Be careful not to get excessive moisture between the edge of the overlay panel and the console, as this might create an electrical hazard or cause the electronics to fail.

Expert service and maintenance at a reasonable cost are available through your factory-trained, authorized TRUE dealer. The dealer maintains a stock of repair and replacement parts and has the technical knowledge to meet your service needs.

APPENDIX A

TARGET HEART RATE CHART

APPENDIX A

TARGET HEART RATE CHART

TARGET HEART RATE CHART

AGE	60%	75%	85%
20	120	150	170
25	117	146	166
30	114	143	162
35	111	139	157
40	108	139	153
45	105	131	149
50	102	128	145
55	99	124	140
60	96	120	136
65	93	116	132
70	90	112	128
75	87	109	123
80	84	105	119
85	81	101	115

WEIGHT LOSS RANGE

AEROBIC TRAINING RANGE

INCREASED PERFORMANCE RANGE

values from ACSM guidelines

Remember to check with your physician before beginning any exercise program. Your physician can help determine an appropriate target heart rate. Medications often affect heart rate.

CHECK WITH YOUR PHYSICIAN

APPENDIX B

SPECIFICATIONS

SPECIFICATIONS
PS50 Recumbent

Brake System	Self-Generating
Workload Range	30 to 450 Watts
Belt	Poly-V
Display Type	Led
Data Readouts	Time, Work Level, Distance, Watts, Rpm, Mets, Heart Rate, Calories
Message Center	16 Characters
Heart Rate Monitoring	Contact + Wireless
HRC (Heart Rate Control) Workout	Yes
HRC Cruise Control	Yes
Workouts	Cardio, Fat Burn, Hills, Random, Manual
Pre-Set Workout Resistance Levels	16
Manual Workout Resistance Levels	42
One Touch Workout Keys	Yes
Pause Features	Infinite
Power Source	110VAC External
Frame	Robotically Welded, Heavy-Gauge Steel Tubing
Footprint	46"H X 25"W X 64"L (117 cm X 64 cm X 163 cm)
Bike Weight	155 lbs (70 kg)
Maximum User Weight	350 lbs (159 kg)
Seatback	Reclining Mesh Seatback
Crank System	One-Piece Forged Steel With Sealed Bearings
Reading Rack	Yes
Accessory / Water Bottle Holder	Yes
Warranty	Frame (Lifetime), Parts (3), Labor (1)



 **TRUE**[®]

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